REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 25, 26, 29-32, 64, 65 and 67-71 are presently pending in this application, Claims 25 and 29 having been amended by the present amendment.

In the Office Action dated March 30, 2007, Claims 25, 26, 29, 64and 69 were rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. (U.S. Patent 5,837,155) in view of Wroe et al. (U.S. Patent 4,994,903); Claims 30-32, 67, 68 and 70 were rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. and Wroe et al., and further in view of Brandli et al. (U.S. Patent 5,227,012); and Claim 65 was rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. and Wroe et al., and further in view of Misfeldt (U.S. Patent 3,972,755).

Claim 25 has been amended herein. This claim amendment is believed to find support in the specification, claims and drawings as originally filed, for example, page 54, line 33, to page 55, line 2 of the specification, and no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

A brief summary of Claim 25 as currently amended is believed to be helpful. Claim 25 is directed to a multilayer printed circuit board and recites: "a resin substrate having a first surface and a second surface; a first resin insulating layer formed over at least one of the first and second surfaces of the resin substrate, the first resin insulating layer comprising a thermosetting polyolefin resin; a lower metal layer formed on the first resin insulating layer; and a conductor circuit comprising a metal and formed on the lower metal layer, wherein said lower metal layer has a same pattern as said conductor circuit and comprises at least one

metal selected from the group consisting of metals of the 4th through 7th periods in Group 4A through Group lB of the long-form periodic table of the elements, Al, and Sn, excluding Cu, and said first resin insulating layer has a flat and level surface such that the lower metal layer formed on said flat and level surface of said first resin insulating layer is made sufficiently flat and level and said conductor circuit formed on said lower metal layer is made sufficiently flat to provide no signal conduction delay for a high frequency signal."

By providing such an insulating layer, the lower metal layer with good adhesion stays on the insulating layer without roughening its surface for adhesion and does not inherit the roughness of the insulating layer, thereby allowing the conductor circuit to be secured on the insulating layer while being free of any roughened portions. Consequently, the conductor circuit can transmit a high frequency signal without transmission delay.

Inagaki et al. is directed to a multilayer print circuit board. Nevertheless, Inagaki et al. does not teach or suggest "a first resin insulating layer formed over at least one of the first and second surfaces of the resin substrate, the first resin insulating layer comprising a thermosetting polyolefin resin ..., wherein said lower metal layer has a same pattern as said conductor circuit ..., and said first resin insulating layer has a flat and level surface such that the lower metal layer formed on said flat and level surface of said first resin insulating layer is made sufficiently flat and level and said conductor circuit formed on said lower metal layer is made sufficiently flat to provide no signal conduction delay for a high frequency signal" as recited in amended Claim 25. On the contrary, Inagaki et al. states as follows: "the process of production is described above as using the copper foils 5 which have *the working surfaces thereof coarsened preparatorily*. The use of the copper foils of this kind may well be called preferable in the sense that the layers of the insulating resin composition which have been softened by the heat of the heated pressure rollers during the course of lamination are enabled to acquire *exalted adhesive force by following the undulating coarsened working surfaces of*

the copper foils. Copper foils which have an adhesive agent applied thereto in advance may be used instead. It is particularly *advantageous to use copper foils that have the adhesive agent applied in advance to the coarsened working surfaces thereof. In this case, the layers of the insulating resin composition acquire still higher adhesive strength.* It is appropriate in this case to use an epoxy resin-based adhesive agent. *Particularly, when the insulating resin composition of the present invention is used as the adhesive agent to be applied to the coarsened working surfaces of the copper foils, the copper foils thus coated with the resin composition exhibit higher adhesive force than the copper foils which do not use the resin composition for coating the coarsened working surfaces thereof*"[1] (emphasis added in italic). As such, Inagaki et al. is believed to simply show a copper film conductor laminated on an insulating resin layer, and the copper film conductor is roughened such that its roughened surface intimately laminates to the insulating resin layer when they are heated and pressed with a roller. Therefore, the structure recited in Claim 25 is clearly distinguishable from Inagaki et al., and furthermore, the Inagaki et al. device is believed to teach away from the structure recited in Claim 25.

Also, Wroe et al. does not teach or suggest "a first resin insulating layer formed over at least one of the first and second surfaces of the resin substrate, the first resin insulating layer comprising a thermosetting polyolefin resin ..., wherein said lower metal layer has a same pattern as said conductor circuit ..., and said first resin insulating layer has a flat and level surface such that the lower metal layer formed on said flat and level surface of said first resin insulating layer is made sufficiently flat and level and said conductor circuit formed on said lower metal layer is made sufficiently flat to provide no signal conduction delay for a high frequency signal" as recited in amended Claim 25. As discussed in the previous response, Wroe et al. simply shows a heat sink 30 which has an Invar portion and a Cu/Al

[1] Inagaki et al., column 12, lines 15-37.

portion attached to a substrate 12, and moreover, according to Wroe et al., circuit paths 14 are merely "a thin layer 26 of a metal such as copper, aluminum or copper-clad aluminum ...." As such, the Wroe et al. device is also believed to teach away from the structure recited in Claim 25. Hence, the structure recited in Claim 25 is clearly distinguishable from Wroe et al.

Likewise, the other references, Brandli et al. and Misfeldt, are not believed to teach or suggest the lower metal layer as recited in Claim 25 either, and the structure recited in Claim 25 is believed to be clearly distinguishable from both Brandli et al. and Misfeldt.

As discussed above, none of Inagaki et al., Wroe et al., Brandli et al. and Misfeldt discloses the lower metal layer as recited in Claim 25, and their teachings, even combined, are not believed to render the structure recited in Claim 25 obvious.

For the foregoing reasons, Claim 25 is believed to be allowable. Furthermore, since Claims 26, 29-32, 64, 65 and 67-71 depend directly or indirectly from Claim 25, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 26, 29-32, 64, 65 and 67-71 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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